

Remarks

The present application was filed June 28, 2001 with original claims 1-25. The Office Action (Paper No. 6) mailed December 18, 2003 rejected claims 1-6, 10-13, 15, and 19-23, and objected to claims 7-9, 14, 16-18, 24, and 25.

The Applicant has provided certain amendments to the claims. The amendments to the claims include amendments to the language of claims 1 and 10. The amendments to claims 1 and 10 include deleting the explicit references to "first," "second," and "third" servo wedges. These amendments are made solely to make explicit that which was before implicit, and to more particularly point out and distinctly claim that which the Applicant considers to be patentable subject matter of the present invention. These amendments are proper, do not introduce new matter, do not narrow the scope of the claimed subject matter, and place the application in proper condition for reconsideration.

Rejection of Claims Under 35 U.S.C. §102(e)

The Office Action rejected claims 1-6, 10-13, 15, and 19-23 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,519,107 issued to Ehrlich et al ("Ehrlich '107"). This rejection is respectfully traversed.

Claim 1

Ehrlich '107 cannot sustain the Section 102 rejection because it does not disclose or suggest all the elements of claim 1. Namely, claim 1 recites at least the following:

during an instance of a first sector passing by the head....;
and
during the instance...writing two or more servo wedges....
(excerpt from claim 1, emphasis added)

This language requires the writing of two or more servo wedges during one instance of the first sector passing by the head; in other words, the two or more wedges

are written during less than one revolution of the disc. A skilled artisan recognizes a sector defines a finite beginning and ending position on the data storage disc. FIG. 5, for example, shows the sector 302 beginning with servo burst 320 and ending with servo burst 325. The “instance of a first sector passing the head” plainly means the event defined by the beginning, ending, and medial positions of the sector passing the head one time. If the Applicant had intended to claim the writing step occurring during multiple passes of the sector relative to the head, which he did not, then the claim would necessarily recite “during instances of a first sector passing the head.”

Ehrlich ‘107 discloses writing two servo wedges during more than one revolution of the disc, and thus, during multiple instances of the respective sector passing the head:

During the 14 revolutions for each servo track, approximately one revolution is required to seek to and settle at a next track, one revolution is needed to write each intermediate burst d, e, or f, one revolution is needed to seek and settle at a position to write a final product burst D, E or F, eight revolutions are needed to collect RRO information in order for rejection of higher RRO harmonics, two revolutions are needed to compute burst correction values (BCVs) which are recorded and later combined with the digitized PES in order to cancel out positional error RRO present along the track locus being followed. The BCVs are initially stored e.g. in the drive’s buffer memory 55 on circuit board 50. One final revolution is then needed to write the final product burst D, E or F within field 26 using the PES and BCV stored in memory for the particular sector location.
(Ehrlich ‘107 col.15 lines 49-63, emphasis added)

Ehrlich ‘107 is silent regarding the claimed feature of writing two or more servo wedges during an instance of the sector passing by the head. As such, it cannot sustain the Section 102 rejection. The amendments to claim 1 broaden the scope of the claimed invention in that the originally recited “first servo wedge,” “second servo wedge,” and “third servo wedge” each contemplates any of the servo wedges 320, 322 or 324, respectively as described in the illustrative embodiments of the present

invention. Particularly, the amendments to claim 1 do not narrow the claim scope in view of a rejection over prior art. Reconsideration and withdrawal of the rejection of claim 1 are respectfully requested.

Claim 10

Ehrlich '107 cannot sustain the Section 102 rejection because it does not disclose or suggest all the elements of claim 10 for the same reason as above for claim 1.

Namely, claim 10 recites at least the following:

a read/write channel...wherein during an instance of a first sector passing by the head...and during the instance...the read/write head writes two or more servo wedges....

(excerpt from claim 10, emphasis added)

As above, this language recites the writing of two or more servo wedges during one instance of the first sector passing by the head; in other words, the two or more wedges are written during less than one revolution of the disc. Ehrlich '107 is silent regarding the claimed feature of writing two or more servo wedges during an instance of the sector passing by the head. As such, it cannot sustain the Section 102 rejection. The amendments to claim 10 broaden the scope of the claimed invention in that the originally recited "first servo wedge," "second servo wedge," and "third servo wedge" each contemplates any of the servo wedges 320, 322 or 324, respectively, as described in the illustrative embodiments of the present invention. Particularly, the amendments to claim 1 do not narrow the claim scope in view of a rejection over prior art.

Reconsideration and withdrawal of the rejection of claim 10 are respectfully requested.

Claim 19

Ehrlich '107 cannot sustain the Section 102 rejection because it does not disclose or suggest all the elements of claim 1. Namely, claim 1 recites at least the following:

means for writing servo wedges with the head for each
sector position of a plurality of tracks of the disc drive.
(excerpt from claim 19, emphasis added)

Proper construction of this means-plus-function claim considers the structure disclosed for writing as being the offset head and read/write channel. As discussed above, this structure is adapted for reading a servo wedge on a first track and in a first sector with the read element, and writing two or more servo wedges on a second track and in the first sector with the write element during less than one revolution of the media after reading the servo wedge.

Ehrlich '107 is silent regarding reading a servo wedge on a first track and in a first sector and writing two or more servo wedges on a second track and in the first sector during less than one revolution of the media after reading the servo wedge. As such, it cannot sustain the Section 102 rejection. Reconsideration and withdrawal of the rejection of claim 1 are respectfully requested.

Claims 2-6, 11-13, 15, and 20-23

The claims are allowable as dependent claims depending from an allowable independent claim 1, 10, or 19, for the reasons above, and providing additional limitations thereto. Claims 6, 11, 15, 20 and 21 have been amended to broaden the scope of the claimed invention in that the originally recited "first servo wedge," "second servo wedge," and "third servo wedge" each contemplates any of the servo wedges 320, 322 or 324, respectively as described in the illustrative embodiments of the present invention. Particularly, the amendments to these claims do not narrow the claim scope

in view of a rejection over prior art. Reconsideration and withdrawal of the present rejection of these claims are respectfully requested.

Allowed Claims and Allowable Subject Matter

The Applicant gratefully acknowledges the indication of allowable subject matter in claims 7-9, 14, 16-18, 24, and 25. For the reasons above, however, the broader independent claims from which these claims depend are allowable. As such, the Applicant has elected not to place these dependent claims in independent form. Claims 7-9, 14, 16-18, 24 and 25 have been amended to broaden the scope of the claimed invention in that the originally recited “first servo wedge,” “second servo wedge,” and “third servo wedge” each contemplates any of the servo wedges 320, 322 or 324, respectively as described in the illustrative embodiments of the present invention. Particularly, the amendments to these claims do not narrow the claim scope in view of a rejection over prior art.

The Applicant agrees with the Examiner’s statement of reasons for allowable subject matter to the extent that the claims of the present invention are patentable over the references in the record. The Applicant expressly traverses the Examiner’s statement of reasons for allowable subject matter to the extent that any comment is intended or has the effect of limiting a claim scope, explicitly or implicitly, by not reciting verbatim the respective claim language, or is intended or has the effect of limiting a claim scope by stating or implying that all the reasons for patentability are in any way fully enumerated.

Conclusion

This is a complete response to the Office Action mailed December 18, 2003.

The Applicant respectfully requests that the Examiner enter the above amendments,
reconsider the application and allow all of the pending claims.

The Examiner is invited to contact the below signed Attorney should any
questions arise concerning this response.

Respectfully submitted,

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MATCH LINE TO FIG. 4A

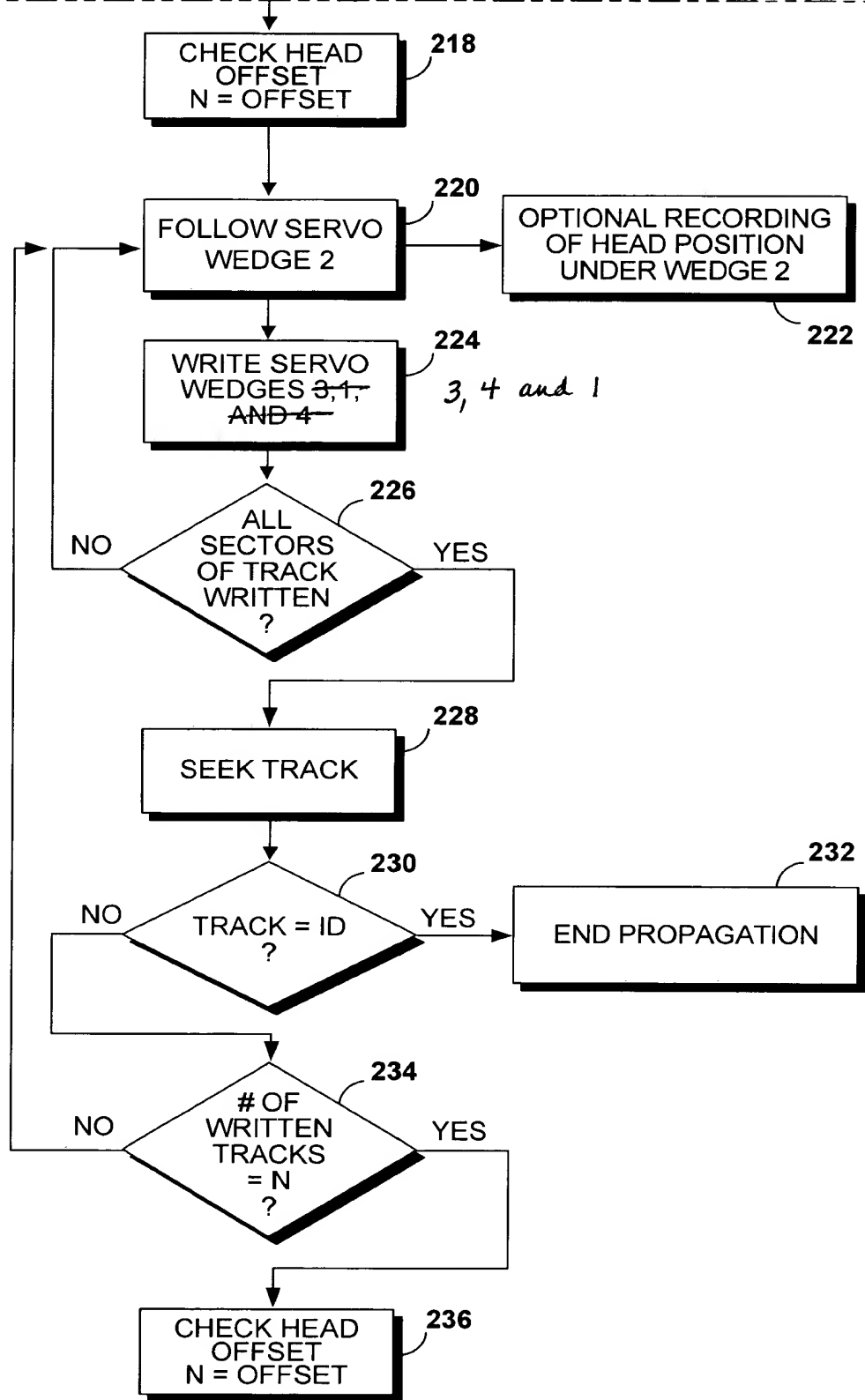


FIG. 4B

MATCH LINE TO FIG. 4C